

CHAPTER 5. PLANNING REQUIREMENTS.

5-1. Planning Process. Planning for fish and wildlife has four basic stages: a clear statement of goals and objectives; collection and analyses of data on which to base a plan, often including the preparation of various maps; preparation of the plan which involves updating, organizing, and synthesizing available information to solve or meet specific problems; and implementation of the plan. If general information on the nature of an area, including the presence or absence of certain species of wildlife, is not available, it may not be possible to state specific goals and objectives. The planning process starts with information gathering to understand the situation; proceeds to analysis, identification of specific problems and requirements, and establishment of goals; then, after synthesis, recommends a solution or model for action; and finally, begins implementation of the plan.

5-1.1. Requirements. Fundamentally, a wildlife management plan, as described in Practical Wildlife Management (app B, No. 15), should:

5-1.1.1. *Be feasible, biologically.* It should depend on improvement of existing natural resources.

5-1.1.2. *Aim to increase the basic productivity of the area.* It should not incorporate features that encourage erosion, deplete soils, or create situations which can be maintained only by constant artificial treatment, such as pesticides, herbicides, and the like.

5-1.1.3. *Make sense economically.* It should be capable of being completed in a reasonable length of time, and, preferably, without acquisition of additional equipment.

5-1.1.4. *Aim, whenever possible, at monitoring and increasing plants and animals already native to the area and at complementing existing terrain, watercourses, etc.*

5-1.1.5. *Contain numerical priorities, proposed methods of accomplishment (i.e., whether by contract or in-house), estimated costs, and costs if action is deferred.*

5-1.2. *Methods.* Guidelines for Developing a Comprehensive Plan for the Management of Fish and Wildlife Resources (app B, No. 12) may be helpful in developing fish and wildlife plans. (Air Force installations should use the format prescribed by AFR 126-1.) The Wildland Resources Allocation Procedure (WRAP), developed by the Tennessee Valley Authority (app C, No. 3), may also be useful. The WRAP system constructs a timber-harvest

method which should provide a number of benefits. It produces a computer printout that includes a management plan and harvesting schedule based specifically on a landowner's objectives, consistent with the resource potential of his property. This method would appear to have potential use in fish and wildlife planning. An Outline for a Fish and Wildlife Management Plan has been prepared (app. E) to assist installations in preparing new plans, or in revising current plans. See annex I to appendix E for a suggested format for an annual work plan.

5-2. Information Needed.

5-2.1. *Scope.* Before planning, it is necessary to know what exists in an area, and what features may either lend themselves to or prohibit certain types of improvements. Necessary information includes:

5-2.1.1. *Data on the various populations of fish and wildlife currently in the area, and whether they are increasing, decreasing, or essentially stable.*

5-2.1.2. *Detailed data on the types, extent, and distribution of the habitat and its potential for improvement through management.*

5-2.1.3. *Knowledge of species requirements, their geographic ranges, and factors such as climate, temperature extremes, or inadequate precipitation which would limit populations or prevent their occurrence in an area.*

5-2.1.4. *Data on past and current land use, including methods of vegetation management, types and extent of agricultural crops grown, herbicides and insecticides used, and sources of pollution.*

5-2.1.5. *Demands for fish and wildlife, described in such a way that it is clear whether unsatisfied, current demand should be included in projected demand estimates.*

5-2.1.6. *Knowledge of current or potential impacts of wildlife on the military mission.*

5-2.1.7. *Goals and objectives of the installation with respect to natural resources management and, particularly, with respect to fish and wildlife, as related to military and other agency responsibilities.*

5-2.1.8. *Time period available for attaining the objectives.*

5-2.1.9. *Availability of manpower and funds and identification of in-house versus contractual capabilities for implementing the plan.*

5-2.2. *Sources of Information.* Much information may already be available on an installation and need only be compiled and presented in the form of maps,

charts, and tables. Other information should be obtained through in-house surveys and research, through secondary sources such as Federal and

state agencies, or through contractual arrangements. Table 5-1 indicates the information needed and suggested sources for obtaining it.

Table 5-1. Planning Information: Needs and Sources

Information needed		Suggested sources
1.	Fish and wildlife inventories ^a	See Chapter 3
2.	Habitat inventories	See Chapter 2
	Soils, including pH, fertilizing needs, etc.	Soil Conservation Service (SCS), county agents, universities
	Vegetation	Literature, U.S. Department of Agriculture (USDA), U.S. Department of Interior (USDI), universities
	Water, quantity and quality and flooding	USDA, USDI, Environmental Protection Agency (EPA), Tennessee Valley Authority (TVA), Corps of Engineers, respective state agencies
	Topography (maps)	U.S. Geological Survey (USGS)
	Geology	USGS and respective state agency
	Soil and land capability maps	USGS, SCS
	Aerial photographs	SCS, National Air and Space Administration (NASA), USGS, in-house
	Climate and weather	National Oceanic and Atmospheric Administration (NOAA) in the U.S. Department of Commerce
3.	Species requirements	Literature, USDA, USDI
4.	Land use ^b	In-house, literature
5.	Demands for fish and wildlife	In-house, USDI, respective state agencies
6.	Impacts of wildlife on military mission	In-house, USDI
7.	Goals and objectives	In-house
8.	Time available for attaining objective	In-house
9.	Man-power and funds	In-house

^aIn connection with fish and wildlife inventories, it is suggested that, where possible, creel censuses be conducted and checking stations be operated to obtain needed data on ratios of bucks to does and of adults to young in deer herds and comparable data for other wildlife species. If the checking stations are manned by trained biologists, information collected on degree of parasitism may provide clues to the condition of the habitat and indicate needed changes in management.

^bIt is suggested that land use records include: history of land use, including timber cutting, forest inventories, forest fires, prescribed burns, etc.; types and extent of agricultural crops grown and information on lime, fertilizers, and pesticides used; grazing intensity over time; maps of physical and cultural features such as roads and airfields; and number of acres used or available for each activity or use.